

Schary, Claire

From: ADES Dennis R <ADES.Dennis@deq.state.or.us>
Sent: Tuesday, November 04, 2014 8:55 AM
To: BIORN-HANSEN Sonja; Schary, Claire
Subject: RE: WQ trading issues

Thank you Sonja.

Claire as you may know DEQ has initiated rulemaking for WQ trading. Courtney Brown is project manager and I expect she will soon contact you to provide more details. I know EPA was instrumental in the development Oregon's trading program and I look forward to working with you as we develop rule language and revise our internal guidance.

Dennis Ades
Water Quality Program
DEQ Northwest Region
503 229-5886

From: BIORN-HANSEN Sonja
Sent: Tuesday, November 04, 2014 8:46 AM
To: ADES Dennis R; 'Claire Schary'
Subject: FW: WQ trading issues

Denny and Claire – now you have each other's contact info.

Claire – Hi! Been thinking about you lately. I know you are not an economist, but you helped me appreciate how useful it can be to sometimes think like one. Been having to do some of that kind of thinking lately. Feels good. I hope you are well!

Sonja

From: ADES Dennis R
Sent: Monday, November 03, 2014 3:14 PM
To: BIORN-HANSEN Sonja
Subject: RE: WQ trading issues

Thanks Sonja, do you have Claire's contact information at EPA?

Denny

From: BIORN-HANSEN Sonja
Sent: Friday, October 31, 2014 3:35 PM
To: ADES Dennis R
Subject: RE: WQ trading issues

Here is the closest I have to a final version. I'm not sure why I don't have a final version. Probably the consultant only gave it to me in hardcopy form and I eventually recycled it.

It was started before my time and it was not very good. Janet referred to it as "a dog" and I was in agreement.

Were the comments I provided you on the trading issues useful to you?

Sonja

From: ADES Dennis R
Sent: Friday, October 31, 2014 3:27 PM
To: BIORN-HANSEN Sonja
Subject: RE: WQ trading issues

Heigh Sonja,

I was looking at the WQ trading case study report you wrote in July of 2007. In it you refer to another document called a resource guide to watershed-based trading. Do you have an e-copy to send my way per chance?

Are you on trick or treat duty tonight or will Pe cover that for you?

Have a good weekend
Denny

From: BIORN-HANSEN Sonja
Sent: Friday, October 31, 2014 2:20 PM
To: BROWN Courtney
Cc: ADES Dennis R
Subject: RE: WQ trading issues

Oh good! I was afraid I might be going on too long.

One more thought on the following:

- a. Accrual: When do credits accrue, at the time of planting or time of actual shade generation?

If credits aren't allowed to accrue at the time of planting, we will be incentivize installing chillers/cooling towers over planting trees. That's because with planting, there will be uncertainty as to when the credits will actually accrue and with chillers/coolers, there will not be such uncertainty. Credits will accrue the moment the switch is thrown.

Another way to frame:

Accrual: what the pros/cons of credits accruing at the time of planting vs. the time of actual shade generation?

From: BROWN Courtney
Sent: Friday, October 31, 2014 11:48 AM
To: BIORN-HANSEN Sonja
Subject: RE: WQ trading issues

Thank you so very much, Sonja!

From: BIORN-HANSEN Sonja
Sent: Thursday, October 30, 2014 4:55 PM
To: BROWN Courtney; NOMURA Ranei; MICHIE Ryan; 'HICKMAN Jane'
Cc: FOSTER Eugene P; ADES Dennis R; TAYLOR John
Subject: RE: WQ trading issues

I have been at the PNCWA conference this week and have been digging out from under my email all day... (go away for 3 days, spend a day digging out. There is something wrong with this picture...). Anyway, here are some thoughts.

2. Incentives: What are appropriate incentives to ensure trades (restoration) occurs where greatest gains will be accrued, but not necessarily where most credits will be generated? I would phrase as: how do we value trades such that the resulting restoration projects take place in a manner/location that will maximize environmental gain? Important issue! At the PNCWA conference, I saw slides from the Freshwater Trust showing restoration projects on the south side of the stream only. Once I saw those pictures, I understood the criticism I have heard of FWT that “they are only in it for the money”. If doing planting projects on only one side of the stream and only in those areas with maximum southern exposure was the best way to maximize biodiversity, that is how Mother Nature would do it. She does not do it that way. We need to make sure we don’t either. Temperature is a surrogate for ecosystem conditions, and if we focus too narrowly on the number (like FWT is doing), we miss the point, kind of like installing a chiller misses the point.

There are multiple issues here:

- How do we incentivize planting continuous stretches of stream (both sides)? Answer: by modifying the shade-a-lator to not include orientation. The question for the group could be: Should DEQ remove the incentive that currently exists for planting only one side of the stream and for planting areas with particular orientations?
- Should DEQ incentivize restoration projects that will result in contiguous areas getting restored over disconnected projects? The answer is an easy yes, however to date no one has figured out how to quantify the additional gain that would accrue. I suppose we could throw it on to the other party and say something like “if you can show that a single contiguous project will result in greater gain than so many disconnected projects, we will give you an extra 5 or 10% credit for achieving the former.” It is a long shot, but our offering up an incentive might trigger some useful thinking/learning and creative explaining. This approach would also give us room to say no when someone does not make a very good case. The question for the group could be: “should DEQ offer a small incentive (like 5 or 10%) for the completion of contiguous projects involving adjacent landowners, if the party seeking credit can show, to DEQ’s satisfaction, that these projects warrant the additional credit?”
- How do we incentivize “protect the best, restore the rest”? In the CWS trade, Kendra Smith pushed really hard for DEQ giving credit for protecting already intact areas because protection is worth more than restoration and if the only thing you incentivize is restoration, intact areas are less likely to remain intact. I told her if she could quantify the value of protection, I might be able to figure out a way to fashion the trading language to allow/encourage it. She couldn’t/didn’t. Maybe someone can propose a way... Probably not though.

3. Trade ratios: How do we justify use of trade ratios e.g. 2:1 or 1:1 on smaller waters and to account for risk and uncertainty. CWS was given the option to do 1:1 and they didn’t, so based on that, I’d like it if we decided to not distinguish between larger and smaller streams. Regarding uncertainty, best to address it directly than bury the issue in a trading ratio. Example: the project might get ripped out in a large storm event. Instead of making them plant more (like 2:1) to compensate for this possibility, better to require them to replant. The 2:1 ratio used in the CWS trade was intended to compensate for the fact that trees take awhile to grow. Let me know if you want to see the math.

4. Credits:

- a. Accrual: When do credits accrue, at the time of planting or time of actual shade generation?
- b. Quantification I’d re-frame as “Here is how DEQ proposes quantifying credits for shade. Anybody got any better ideas?” If you leave it too open, you are less likely to get useful feedback. At least that is what I learned from the stakeholder group that I had when designing the CWS trade. The more specific the question, the more useful the feedback. If it was too specific, they always let me know.
- c. Reporting See above.
- d. Lifespan/retiring of credits? This could be tricky. Suggestion: ask people to name the pros and cons are of retiring credits after 20 years. See what you get.

5. Regulatory Baseline

- a. Quantifying regulatory basement **You mean baseline? A different way to ask: what sorts of projects should/should not qualify for credit? I hope you will be open to hearing my opinions on the answers we get. Claire Schary taught me to be wary of how regulators value things and of our propensity for managing to discourage the very thing we say we want.**
- b. Quantifying uplift **Need to be more specific. I don't know what the question is.**
- c. "Double counting" **Need to be more specific. I don't know what the question is.**
- d. TMDLS issues/non-point source trades **Need to be more specific. I don't know what the question is.**

6. Third party trade registration/public access to trades **Need to be more specific. I don't know what the question is.**

7. Pollutants eligible for trades (what about non bio accum toxins?) **I continue to favor trades involving toxics, whether they bioaccumulate or not. If you prohibit all such trades all of the time, what you are saying is "there is no better way to reduce the discharge of toxics to the environment than to make point sources upgrade their treatment processes to whatever level needed to meet standards." If we act out of this, the result will be that we don't get to harness the resources that point sources are willing to spend to achieve compliance with their permits, to address sources of toxics over which we have little-to-no regulatory control. That said, another way we could harness these resources is to allow permit holders to apply for variances and submit pollution reduction plans. This might be more palatable for a lot of people even if it results in the same actions at the end of the day.**

From: BROWN Courtney

Sent: Friday, October 24, 2014 2:27 PM

To: NOMURA Ranei; BIORN-HANSEN Sonja; MICHIE Ryan; 'HICKMAN Jane'

Cc: FOSTER Eugene P; ADES Dennis R; TAYLOR John

Subject: WQ trading issues

Hi there –

You all are officially on the "team" for the water quality trading rulemaking and IMD revision effort. We are preparing for our first "policy forum" on water quality trading (scheduled for 12/4/14). A policy forum is a meeting that is open to the public and stakeholders where DEQ will provide brief presentations on WQ trading issues and solicit feedback from participants.

Right now we are trying to prioritize the issues that should be addressed in the policy forums – particularly this first forum. This is where you come in: **can you tell me what YOU think are the most important issues we need to solicit feedback on?**

Below is a random sample of potential trading issues that need resolution. The list is in no particular order of importance and is not comprehensive. Can you give me some feedback on any issues not on this list that you think should be? Also, could you help us prioritize and tell me which issues you think deserve the most attention? I know you are all busy **so if I could get even your top 5 issues ASAP, that would be a great start.** Thank you!

- 8. Incentives: What are appropriate incentives to ensure trades (restoration) occurs where greatest gains will be accrued, but not necessarily where most credits will be generated?
- 9. Trade ratios: How do we justify use of trade ratios e.g. 2:1 or 1:1 on smaller waters and to account for risk and uncertainty.
- 10. Credits:

- a. Accrual: When do credits accrue, at the time of planting or time of actual shade generation?
- b. Quantification
- c. Reporting
- d. Lifespan/retiring of credits?

11. Regulatory Baseline

- a. Quantifying regulatory basement
- b. Quantifying uplift
- c. "Double counting"

12. TMDLS issues/non-point source trades

13. Third party trade registration/public access to trades

14. Pollutants eligible for trades (what about non bio accum toxins?)

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